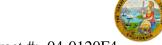
### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011485 Address: 333 Burma Road **Date Inspected:** 14-Jan-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 1900 **Project Name:** SAS Superstructure **OSM Departure Time:** 700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

**Summary of Items Observed:** 

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

Blast Shop #1

This QA Inspector along with Caltrans QA Inspector Mr. Mike Hasler performed random visual inspections of the upper internal surfaces on OBG Segment 8BE between panel point (PP)65 and the weld seam where OBG segment 8AE is to be attached as per ZPMC Notice of Inspection request number 2508. This notification states "OBG internal ceiling and the entire floor from the weld seam to panel point PP65" and the entire floor was covered with blasting grit, and various electrical cables. ABF and ZPMC Inspectors indicated to this QA Inspector that the only areas to be visually inspected today are the upper internal surfaces. ZPMC had recently completed initial grit blasting, prior to application of paint, and the steel surfaces that were inspected were mostly free of rust oxide and other contaminants that had previously obscured portions of the plates and weld surfaces. This QA Inspector visually observed approximately 50 locations that required grinding to resolve visual weld spatter, arc strikes, shallow nicks, scrapes, and other minor surface rejections. The areas were marked with colored chalk and ZPMC workers were using electric grinders to remove the visually unacceptable areas and ZPMC will be performing magnetic particle inspections of the arc strike removal areas after they are removed.

# WELDING INSPECTION REPORT

(Continued Page 2 of 2)

#### **OBG BAY 5**

At around 1930 hours this QA Inspector observed ZPMC workers appear to be preparing to perform heat straightening of OBG Traveler Rail 11TR5-006. This QA Inspector asked ZPMC QC Inspector Mr. Zhong Chong Biao how much bow was in this traveler rail. Mr. Zhong Chong Biao does not appear to speak very much of the English language and based on what Mr. Zhong Chong Biao said, this QA Inspector understood that Traveler Rail 11TR1-032 has a total bow of 60 mm. This QA Inspector went to the Caltrans office to obtain a string line to measure this bow and when this QA Inspector returned to OBG Bay 5 ZPMC QC representative Mr. Zhang Wei, who speaks English, arrived and he informed this QA Inspector that the total bow of Traveler Rail 11TR1-032 is approximately 30mm and no Caltrans Engineering approval is needed prior to ZPMC performing heat straightening of this traveler rail. This QA Inspector used a string line and confirmed that Rail 11TR1-032, which is approximately 10 meters long, has a 30mm bow and no Caltrans Engineering approval is needed prior to ZPMC performing heat straightening.

# OBG Bay 14

This QA Inspector observed ZPMC has moved approximately 30 OBG traveler rails from OBG Bay 5 to the front of OBG Bay 14 and it appears that that several of these traveler rails have portions of the welds removed due to ZPMC ultrasonic rejections. One ZPMC worker was observed to be grinding on one of the traveler rails and no other ZPMC personnel appear to be working on Caltrans components in OBG Bay 14.

## **Summary of Conversations:**

See Above.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer